IN THE CLAIMS

1. (Currently Amended) An apparatus for dissipating heat from an electronic device, the apparatus comprising:

an evaporator thermally connected to the electronic device to receive thermal energy from the electronic device;

a condenser connected to the evaporator;

a coolant cycling between the evaporator where liquid coolant is evaporated to facilitate cooling the electronic device and the condenser where vaporized coolant is condensed into a liquid for subsequent evaporation; ~~and~~

a heater positioned to supply thermal energy to the coolant ~~such that bubbles form within the coolant to maneuver the coolant into contact with the evaporator~~; and

a pump to transfer the coolant from the condenser to the evaporator.

2. (Cancelled)

3. (Original) The apparatus of claim 1 further comprising an interface thermally connected to the evaporator to transfer thermal energy from the electronic device to the evaporator.

4. (Original) The apparatus of claim 1 further comprising one or more flexible conduits connected to the evaporator and the condenser to transport the coolant between the evaporator and the condenser.

5. (Original) The apparatus of claim 1 wherein the evaporator is a wicked evaporator.

6. (Original) The apparatus of claim 1 wherein the heater is a resistive coil heater.

7. (Original) The apparatus of claim 1 wherein the apparatus is a closed system having an interior volume and the liquid coolant initially occupies more than 90 percent of the interior volume.

8. (Original) The apparatus of claim 7 wherein the closed system comprises only liquid and vapor coolant.

9. (Currently Amended) An integrated circuit cooling system comprising:

an evaporator thermally coupled to the integrated circuit to receive thermal energy from the integrated circuit;

a conduit to guide a coolant to the evaporator; ~~and~~

~~means~~ a heater to add thermal energy to the coolant ~~such that bubbles form within the coolant to maneuver the coolant into contact with the evaporator~~; and

a control connected to the heater to maintain the coolant at an optimum temperature for evaporation by the evaporator.

10. (Original) The integrated circuit cooling system of claim 9 wherein at least a portion of the conduit is flexible.

11. (Cancelled)

12. (Currently Amended) An apparatus for removing thermal energy from an electronic device, the apparatus comprising:

an evaporator thermally coupled to the electronic device to receive thermal energy from the electronic device;

a condenser;

a conduit that provides a closed fluid path between the evaporator and condenser;

a liquid coolant ~~partially filling~~ within the fluid path; ~~prior to activation of the apparatus; and~~

a heater constructed and arranged to supply thermal energy to the liquid coolant ~~and initially activate the apparatus, the thermal energy producing bubbles of gas in the coolant to move the coolant into the evaporator;~~

a pump to transfer the liquid coolant from the condenser to the evaporator; and

a control connected to the heater to maintain the liquid coolant at an optimum temperature for evaporation by the evaporator.

13. (Currently Amended) The apparatus of claim 12 wherein the evaporator, condenser, pump and conduit define a closed system having an interior volume such that the liquid coolant initially occupies more than 90 percent of the interior volume.

14. (Original) The apparatus of claim 12 wherein at least a portion of the conduit is flexible.

15. (Currently Amended) A heat pump having an internal start up mechanism that provides thermal energy to a liquid coolant within an electronic device cooling system as operation of the cooling system is commenced, the start up mechanism being a heater which displaces the liquid coolant when the electronic device is oriented such that there is no liquid coolant within the evaporator by generating bubbles within the liquid coolant until the liquid coolant enters an evaporator that removes thermal energy from the electronic device by evaporating the liquid coolant, the heater adding thermal energy to the liquid coolant when there is liquid coolant within the evaporator to maintain the liquid coolant at an optimum temperature for evaporation by the evaporator.

16. (Cancelled)

17. (Original) The heat pump of claim 15 further comprising a flexible conduit connected to the evaporator to transport the coolant to the evaporator.

18-20. (Cancelled)

21. (Currently Amended) An apparatus comprising:

a cooling system having an evaporator portion and a condenser portion operatively coupled through a closed fluid path having an interior volume;

a coolant within the cooling system, the volume of the coolant in the liquid phase being more than 90% of the interior volume of the closed fluid path; ~~and~~

a mechanism for moving the coolant into the evaporator portion when the apparatus commences operation from a condition where there is no liquid coolant in the evaporator portion, the mechanism being a heater operatively coupled to the cooling system to supply thermal energy to the liquid coolant; and

a control connected to the heater to maintain the liquid coolant at an optimum temperature for evaporation by the evaporator when there is liquid in the evaporator and to produce bubbles of gas in the liquid coolant to move the liquid coolant into the evaporator portion when there is no liquid in the evaporator.

22. (Cancelled)

23. (Original) The apparatus of claim 21 wherein the cooling system comprises one or more flexible conduits to transport the coolant between the evaporator and the condenser.

24. (Currently Amended) A method of cooling an integrated circuit, the method comprising:

adding thermal energy to a liquid coolant to ~~create bubbles to displace the coolant into contact with an evaporator~~ maintain the liquid coolant at an optimum temperature for evaporation by an evaporator; and

evaporating the coolant within the evaporator to remove thermal energy from the integrated circuit.

25. (Original) The method of claim 24 further comprising condensing the vaporized coolant within a condenser before adding thermal energy to the liquid coolant.

26. (Original) The method of claim 24 further comprising pumping the coolant from the evaporator to the condenser.

27. (Original) The method of claim 24 further comprising expanding the liquid coolant after condensing the coolant.

28. (Currently Amended) A kit of parts for an electronic device cooling system, the kit comprising:

an evaporator adapted to be thermally connected to the electronic device such that the evaporator removes thermal energy from the electronic device by evaporating a liquid coolant;

a condenser adapted to be connected to the evaporator such that the condenser condenses the coolant that is evaporated by the evaporator; and

a heater adapted to add thermal energy to the liquid coolant before the liquid coolant is evaporated by the evaporator; and

a control adapted to be connected to the heater to maintain the liquid coolant at an optimum temperature for evaporation by the evaporator when there is liquid in the evaporator.

29. (Original) The kit of parts as claimed in claim 28 further comprising a flexible conduit adapted to be coupled to the condenser and the evaporator to guide the coolant between the condenser and the evaporator.

30. (Original) The kit of parts as claimed in claim 28 further comprising a pump adapted to transport the coolant between the evaporator to the condenser.